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| 10/810,635 | 03/29/2004 | Jang Hui Cho | 46500-000615/US/COA | 9587 |
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| HARNES, DICKEY & PIERCE, P.L.C. | | | EXAMINER | |
| P.O. BOX 8910 | | | SHIBRU, HELEN | |
| RESTON, VA 20195 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,635

Applicant(s)

CHO ET AL.

Examiner

HELEN SHIBRU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 8, 9 and 14-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-9, and 14-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments filed on 12/13/2007 have been entered and made of record. Claims 1-4, 6, 8-9, and 14-36 are pending.

Response to Arguments

2. Applicant's arguments, filed 12/13/2007, with respect to the rejection(s) of claim(s) 1-4, 6, 8-9, and 14-36 under 35 U.S.C 103(a) have been fully considered and are persuasive. Applicant stated that the cited reference of Yamamoto fails to disclose 'at least one navigation data item referencing more than one map.' The Examiner agrees. However, upon further consideration, a new ground(s) of rejection is made further in view of Saeki et al. See below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 8-9, and 14-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US PG PUB 2002/0046328) in view of Yamamoto (US Pat. No. 5,742,569) and further in view of Saeki (US PG Pub 20010043790).

Regarding claim 1, Okada discloses a recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing at least video data as a transport stream in more than one file, each file associated with a different one of the multiple reproduction paths, and the files being interleaved with one another (see page 2 paragraphs 0034-0037, page 8 paragraph 0175, paragraph 0193 and 0234, and figures 4, 26, and 29).

Claim 1 differs from Okada in that the claim further requires a navigation area storing at least one navigation list, the at least one navigation list including one or more navigation data items and controlling a reproduction order of the one or more navigation data items.

In the same field of endeavor Yamamoto discloses a navigation area storing at least one navigation list, the at least one navigation list including one or more navigation data items and controlling a reproduction order of the one or more navigation data items (see fig. 6, col. 12 lines 1-34, where it teaches the PGCI includes program information and cell information, col. 15 line 29-col. 16 line 40 and figs. 5, 7A and 7B). Therefore in light of the teaching in Yamamoto it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by including navigation units in order to control the data.

Claim 1 further differs from the above proposed combinations in that the claim further requires at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data for the video data of the associated file.

In the same field of endeavor Saeki discloses at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data for the video data of the associated file (see fig. 9 where it shows cell #1 referencing more than one map and each map are associated with one of the files. See also the abstract, paragraphs 0067, 0100, 0107-0118 and fig. 11). Therefore in light of the teaching in Saeki it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a navigation data item referencing more than one map in order to arrange address.

Regarding claim 2, Okada discloses wherein each file is divided into data blocks, and the fries are interleaved with one another on a data block by data block basis (see figure 29, see also figs. 2 and 5 in Yamamoto).

Regarding claim 3, Okada discloses wherein each data block represents at least an intra-coded picture of video data (see figure 12 and paragraphs 0005-0009 in page 1 and paragraph 0167 in page 8, see also fig. 2 in Yamamoto).

Regarding claim 4, Okada discloses wherein each data block represents at least one group of pictures (GOP) (see figure 4 in Okada and fig. 2 in Yamamoto).

Regarding claim 6, Yamamoto discloses each of the one or more navigation data items provide navigation information for reproducing at least one of the files (see col. 12 lines 1-34).

Regarding claims 8 and 9, Yamamoto discloses the at least one navigation data item includes a multiple reproduction path indicator indicating that the at least one navigation data item provides navigation information for multiple reproduction paths (see rejection of claim 1 above).

Regarding claim 14, Okada discloses each reproduction path represents a digital channel (see pages 1-2).

Regarding claims 15, Okada discloses each reproduction path represents a sub-channel of an RF channel (see pages 1-2).

Regarding claim 16, limitation of claim 16 can be found in claim 1 above. Therefore claim 16 is analyzed and rejected for the same reason as discussed in claim 1 above.

Regarding claim 17, Okada discloses a method of reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

reproducing at least the video data as a transport stream in more than one file from the recording medium, each file associated with a different one of the multiple reproduction paths, and the files being interleaved with one another (see paragraphs 0013-0048).

Claim 17 differs from Okada in that the claim further requires reproducing at least one navigation list, one or more navigation items and a plurality of maps, the at least one navigation list including one or more navigation data items controlling a reproduction order of the one or more navigation data items, at least one navigation data item referencing more than one map, each map being associated with one of the files and providing position data for the video data of the associated file.

In the same field of endeavor Yamamoto discloses reproducing at least one navigation list, one or more navigation items and a plurality of maps, the at least one navigation list including one or more navigation data items controlling a reproduction order of the one or more navigation data items (see Yamamoto's claim 9, fig. 6, col. 12 lines 1-34, where it teaches the

PGCI includes program information and cell information, col. 15 line 29-col. 16 line 40 and figs. 5, 7A and 7B). Therefore in light of the teaching in Yamamoto it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by including navigation units in order to control the data.

Claim 17 further differs from the above proposed combinations in that the claim further requires at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data for the video data of the associated file.

In the same field of endeavor Saeki discloses at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data for the video data of the associated file (see fig. 9 where it shows cell #1 referencing more than one map and each map are associated with one of the files. See also the abstract, paragraphs 0067, 0100, 0107-0118 and fig. 11). Therefore in light of the teaching in Saeki it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a navigation data item referencing more than one map in order to arrange address.

Regarding claim 18, Okada discloses an apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising: a driver for driving an optical recording device to record data on the recording medium; a controller for controlling the driver to record at least video data as a transport stream in more than one file on the recording medium, each file associated with a different one of the multiple reproduction paths, and the files associated with a different one of the multiple

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reproduction paths, and the files being interleaved with one another (see figure 12 and rejection of claim)

Claim 18 differs from Okada in that the claim further requires controller controlling the driver to record at least one navigation list, one or more navigation data items and a plurality of maps, the at least one navigation list including one or more navigation data items controlling a reproduction order of the one or more navigation data items, at least one navigation data item referencing more than one map, each map being associated with one of the files and providing position data for the video data associated file.

In the same field of endeavor Yamamoto discloses reproducing at least one navigation list, one or more navigation items and a plurality of maps, the at least one navigation list including one or more navigation data items controlling a reproduction order of the one or more navigation data items (see Yamamoto's claim 9, fig. 6, col. 12 lines 1-34, where it teaches the PGCI includes program information and cell information, col. 15 line 29-col. 16 line 40 and figs. 5, 7A and 7B). Therefore in light of the teaching in Yamamoto it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by including navigation units in order to control the data.

Claim 18 further differs from the above proposed combinations in that the claim further requires at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data for the video data of the associated file.

In the same field of endeavor Saeki discloses at least one navigation data item referencing more than one map, each map being associated with one of the files and providing, position data

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for the video data of the associated file (see fig. 9 where it shows cell #1 referencing more than one map and each map are associated with one of the files. See also the abstract, paragraphs 0067, 0100, 0107-0118 and fig. 11). Therefore in light of the teaching in Saeki it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a navigation data item referencing more than one map in order to arrange address.

Claim 19 is rejected for the same reason as discussed in claims 17-18 above.

Claim 20 is rejected for the same reason as discussed in claim 1 above.

Claims 21-24 are rejected for the same reason as discussed in claims 2, 3, 8 and 15 respectively above.

Claims 25-28 are rejected for the same reason as discussed in claims 2, 3, 8 and 15 respectively above.

Claims 29-32 are rejected for the same reason as discussed in claims 2, 3, 8 and 15 respectively above.

Claims 33-36 are rejected for the same reason as discussed in claims 2, 3, 8 and 15 respectively above.

Conclusion

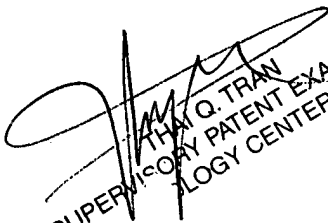
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Helen Shibru
January 7, 2008


THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
LOGY CENTER 2600